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Applicant : NAKANISHI *et al.*
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Examiner : Green, Anthony J
Docket No. : TAN-349
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APPENDIX A

1. (Currently amended) A method for preparation of ~~high concentrated nanometer size~~ fine particles nanoparticles of organic pigment comprising, after dissolving organic pigment into an organic solvent consisting of an amide solvent, pouring the an obtained pigment solution into a second solution, which is said second solution being compatible with said organic solvent and being a ~~is~~ poor solvent to the pigment, by vigorously stirring.

2. (Currently amended) The method for preparation of ~~high concentrated nanometer size~~ fine particles nanoparticles of organic pigment of claim 1, wherein the organic pigment is azo pigment, phthalocyanine pigment, quinacridone pigment, isoindolinone pigment, cyanine pigment, merocyanine pigment, fullerene pigment, polycyclic aromatic compound or polydiacetylene pigment.

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3. (Currently amended) The method for preparation of ~~high concentrated nanometer-size~~
fine ~~particles~~ nanoparticles of organic pigment of claim 2, wherein the organic pigment is
phthalocyanine pigment or quinacridone pigment.

4. (Currently amended) The method for preparation of ~~high concentrated nanometer-size~~
fine ~~particles~~ nanoparticles of organic pigment of claim 3, wherein the amide solvent is ~~at least~~
the ~~one~~ selected from the group consisting of 1-methyl-2-pyrrolidinone, ~~1,3-dimethyl-2-~~
~~imidazolidinone~~ 1,3-dimethyl-2-imidazolidinone, 2-pyrrolidinone, ϵ -caprolactam, formamide, N-
methylformamide, N,N-dimethylformamide, acetoamide, N-methylacetamide, N,N-
dimethylacetamide, N-methylpropaneamide and hexamethylphosphorictriamide.

5. (Currently amended) The method for preparation of ~~high concentrated nanometer-size~~
fine ~~particles~~ nanoparticles of organic pigment of claim 1, wherein the amide solvent is ~~at least~~
the ~~one~~ selected from the group consisting of 1-methyl-2-pyrrolidinone, ~~1,3-dimethyl-2-~~
~~imidazolidinone~~ 1,3-dimethyl-2-imidazolidinone, 2-pyrrolidinone, ϵ -caprolactam, formamide, N-
methylformamide, N,N-dimethylformamide, acetoamide, N-methylacetamide, N,N-
dimethylacetamide, N-methylpropaneamide and hexamethylphosphorictriamide.

6. (Currently amended) The method for preparation of ~~high concentrated nanometer-size~~
fine ~~particles~~ nanoparticles of organic pigment of claim 2, wherein the amide solvent is ~~at least~~

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the one selected from the group consisting of 1-methyl-2-pyrrolidinone, ~~1,3-dimethyl-2-imidazolidinone~~ 1,3-dimethyl-2-imidazolidinone, 2-pyrrolidinone, ϵ -caprolactam, formamide, N-methylformamide, N,N-dimethylformamide, acetoamide, N-methylacetamide, N,N-dimethylacetamide, N-methylpropaneamide and hexamethylphosphoric triamide.

7. (Currently amended) The method for preparation of ~~high~~ concentrated nanometer-size fine ~~particles~~ nanoparticles of organic pigment of claim 1, wherein poor solvent is water, alcohol solvents, ketone solvents, ether solvents, aromatic solvents, carbon disulfide, aliphatic solvents, nitrile solvents, sulfoxide solvents, halide solvents, ester solvents, ionic solution or a mixed solution consisting mixture of these two or more thereof solvents.

8. (Currently amended) The method for preparation of ~~high~~ concentrated nanometer-size fine ~~particles~~ nanoparticles of organic pigment of claim 2, wherein poor solvent is water, alcohol solvents, ketone solvents, ether solvents, aromatic solvents, carbon disulfide, aliphatic solvents, nitrile solvents, sulfoxide solvents, halide solvents, ester solvents, ionic solution or a mixed solution consisting mixture of these two or more thereof solvents.

9. (Currently amended) The method for preparation of ~~high~~ concentrated nanometer-size fine ~~particles~~ nanoparticles of organic pigment of claim 3, wherein poor solvent is water, alcohol solvents, ketone solvents, ether solvents, aromatic solvents, carbon disulfide, aliphatic solvents,

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nitrile solvents, sulfoxide solvents, halide solvents, ester solvents, ionic solution or a mixed solution consisting mixture of these two or more thereof solvents.

10. (Currently amended) The method for preparation of ~~high concentrated nanometer size~~ fine particles nanoparticles of organic pigment of claim 4, wherein poor solvent is water, alcohol solvents, ketone solvents, ether solvents, aromatic solvents, carbon disulfide, aliphatic solvents, nitrile solvents, sulfoxide solvents, halide solvents, ester solvents, ionic solution or a mixed solution consisting mixture of these two or more thereof solvents.

11. (Currently amended) The method for preparation of concentrated nanometer size fine particles nanoparticles of organic pigment of claim 2, using wherein said organic solvent is ~~consisting of at least the one selected from the group consisting of 1-methyl-2-pyrrolidinone, 2-pyrrolidinone or 1,3-dimethyl-2-imidazolidinone, 1,3-dimethyl-2-imidazolidinone or and a mixed amide organic solvent containing 1-methyl-2-pyrrolidinone, 2-pyrrolidinone or 1,3-dimethyl-2-imidazolidinone said solvents in an amount that is more than 50 volume % as a solvent for of the organic solvent, and said using water and/or alcoholic solvent as a poor solvent is water and/or alcoholic solvent.~~

12. (Currently amended) The method for preparation of concentrated nanometer size fine particles nanoparticles of claim 3, using wherein said organic solvent is ~~consisting of at least the~~

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one selected from the group consisting of 1-methyl-2-pyrrolidinone, 2-pyrrolidinone or 1,3-dimethyl-2-imidazolidinone, 1,3-dimethyl-2-imidazolidinone or and a mixed amide organic solvent containing 1-methyl-2-pyrrolidinone, 2-pyrrolidinone or 1,3-dimethyl-2-imidazolidinone said solvents in an amount that is more than 50 volume % as a solvent for of the organic solvent, and said using water and/or alcoholic solvent as a poor solvent is water and/or alcoholic solvent.

13. (Currently amended) The method for preparation of concentrated nanometer-size fine particles nanoparticles of claim 1 comprising, carrying out the preparation of said organic solution by dissolving an organic pigment by the a condition from heating at around maximum boiling point under atmospheric pressure to heating under supercritical state, then pouring the prepared high concentrated organic pigment solution of 0.5 mmol/L to 100 mmol/L into a poor solvent of the a lowest temperature of a liquid state.

14. (Currently amended) The method for preparation of concentrated nanometer-size fine particles nanoparticles of claim 2 comprising, carrying out the preparation of said organic solution by dissolving an organic pigment by the a condition from heating at around maximum boiling point under atmospheric pressure to heating under supercritical state, then pouring the prepared high concentrated organic pigment solution of 0.5 mmol/L to 100 mmol/L into a poor solvent of the a lowest temperature of a liquid state.

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15. (Currently amended) The method for preparation of concentrated nanometer-size fine particles nanoparticles of claim 3 comprising, carrying out the preparation of said organic solution by dissolving an organic pigment by the a condition from heating at around maximum boiling point under atmospheric pressure to heating under supercritical state, then pouring the ~~prepared high-concentrated organic pigment~~ solution of 0.5 mmol/L to 100 mmol/L into a poor solvent of the a lowest temperature of a liquid state.

16. (Currently amended) The method for preparation of concentrated nanometer-size fine particles nanoparticles of claim 4 comprising, carrying out the preparation of said organic solution by dissolving an organic pigment by the a condition from heating at around maximum boiling point under atmospheric pressure to heating under supercritical state, then pouring the ~~prepared high-concentrated organic pigment~~ solution of 0.5 mmol/L to 100 mmol/L into a poor solvent of the a lowest temperature of a liquid state.

17. (Currently amended) The method for preparation of concentrated nanometer-size fine particles nanoparticles of claim 5 comprising, carrying out the preparation of said organic solution by dissolving an organic pigment by the a condition from heating at around maximum boiling point under atmospheric pressure to heating under supercritical state, then pouring the ~~prepared high-concentrated organic pigment~~ solution of 0.5 mmol/L to 100 mmol/L into a poor solvent of the a lowest temperature of a liquid state.